

## No. 6829V

### Link Clamp, pneumatic, flange version

#### dual acting.

Parts of mechanism are made of steel and blued. Piston rod non-rusting, polished. Body is made of aluminium, anodised. HART-COAT® surface for wear-resistance.

Complete with clamping screw.

#### Attachment options:

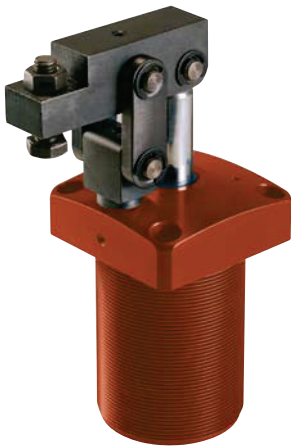
- from above by cylinder screws through the flange
- screwed in using the threads and secured with lock nut
- both ends secured with lock nuts

#### Accessories (not supplied as standard):

- lock nut no. 6829N
- clamping screw no. 6880



CAD

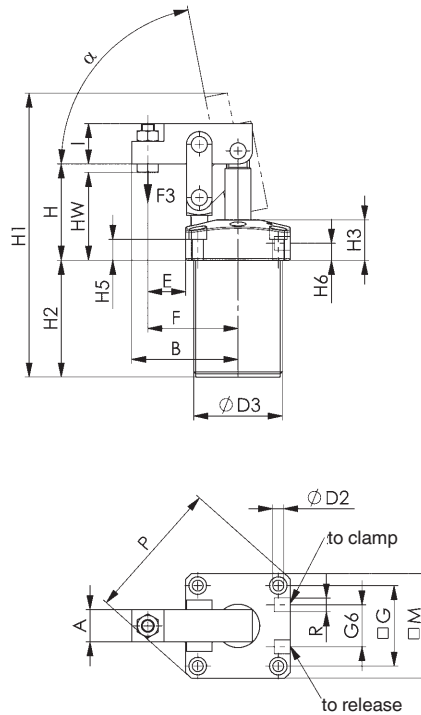


Order no.	Size	F3 [kN]	Clamping screw	Weight [g]
93609	25	0,23	M 6x25	580
93617	32	0,37	M 8x35	950
93625	40	0,56	M 8x35	1200
93633	50	0,76	M12x50	1900
93641	63	1,35	M12x50	2300

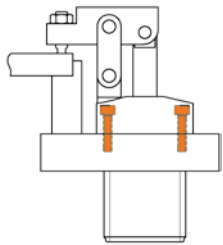
F3 = at 6 bar max. air pressure

#### Note:

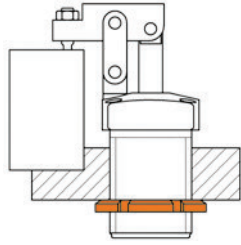
The lever mechanism can be dismantled so that it can be individually modified. The mounting holes in the flange are similar to those in threaded flange No. 6829GF. Operate only with lubricated air.



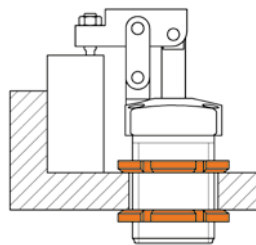
### Examples of mountings



From above with 4 socket cap screws through the flange.



By screwing the body into a tapped hole and locking with a grooved nut.



By inserting the body into a plain hole and locking with two grooved nuts.

### Recommendations



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### Dimensions:

Order no.	Size	A	B	dia. D2	dia. D3	E	F	G	G6	H	H1	H2	H3	H5	H6	HW	I	M	P	R	Piston dia.	$\alpha$
93609	25	16	48,0	5,5	M40x1,5	16,0	41,0	37	23	51,0	144	62	25	15	12,0	37-47	17	50	66	M5	25	79°
93617	32	18	60,0	6,5	M50x1,5	22,0	52,0	45	23	57,0	170	73	25	13	10,5	50-56	20	60	80	G1/8	32	80°
93625	40	20	66,0	6,8	M55x1,5	23,5	56,0	50	26	60,0	178	73	25	13	10,5	50-54,5	25	65	87	G1/8	40	79°
93633	50	22	77,5	8,5	M65x1,5	26,0	63,5	58	32	65,0	200	79	25	11	10,5	47-57	30	75	100	G1/8	50	72°
93641	63	22	88,0	8,5	M80x1,5	29,5	74,0	70	35	71,5	211	80	25	11	9,0	54-64	30	89	118	G1/8	63	63°

Subject to technical alterations.

## No. 6829VA

### Link clamp, pneumatic, flange version

Double-acting with sensor groove and magnetic piston for end-position monitoring.

Steel mechanical parts, burnished. Piston rod non-rusting, polished. Body is made of aluminium, red anodised. HART-COAT® surface for wear-resistance.

Complete with clamping screw.



CAD



Order no.	Size	F3 [kN]	Clamping screw	Weight [g]
562505	25	0,23	M6 x 25	580
562506	32	0,37	M8 x 35	950
562507	40	0,56	M8 x 35	1200
562508	50	0,76	M12 x 50	1900
562509	63	1,35	M12 x 50	2300

F3 = at 6 bar max. permissible operating pressure

#### Note:

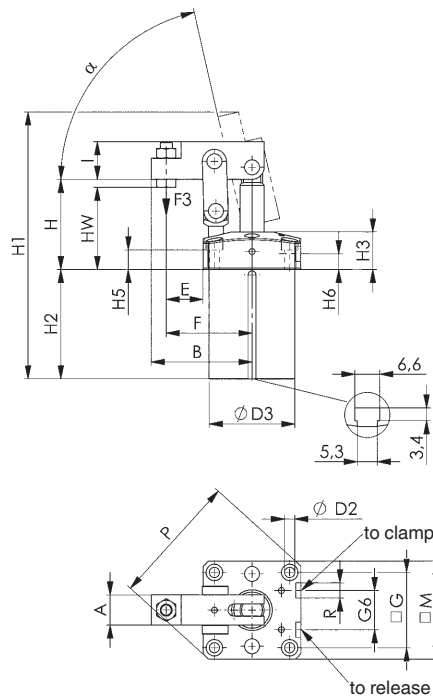
The lever mechanism can be dismantled so that it can be individually modified.  
Can only be operated with oiled air.

Suitable proximity switches for end-position monitoring are available using order no. 392241.

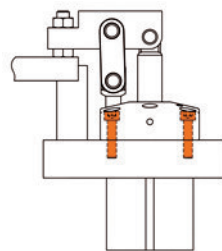
Version: PUR cable 0.3 m with M8 plug connection and rotatable knurled nuts.

Switching function: NOC.

Output: PNP.



#### Example of mounting:



From above with 4 socket cap screws through the flange.

#### Recommendations



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#### Dimensions:

Order no.	Size	A	B	dia. D2	dia. D3	E	F	G	G6	H	H1	H2	H3	H5	H6	HW	I	M	P	R	Piston dia.	$\alpha$
562505	25	16	48,0	5,5	42	16,0	41,0	37	23	51	144	62	25	15	12,0	37,0 - 47,0	17	50	66	M5	25	79°
562506	32	18	60,0	6,5	52	22,0	52,0	45	23	57	170	73	25	13	10,5	50,0 - 56,0	20	60	80	G1/8	32	80°
562507	40	20	67,0	6,8	57	24,5	57,0	50	26	60	177	73	25	13	10,5	50,0 - 54,5	25	65	87	G1/8	40	77°
562508	50	22	77,5	8,5	67	26,0	63,5	58	32	65	200	79	25	11	10,5	47,0 - 57,0	30	75	100	G1/8	50	72°
562509	63	22	88,0	8,5	82	29,5	74,0	70	35	67	204	80	25	11	9,0	50,0 - 58,0	30	89	118	G1/8	63	53°

Subject to technical alterations.

## No. 6829L

### Link clamp, pneumatic, flange version

#### With lowerable clamp arm.

Double-acting. Parts of mechanism are made of steel and burnished. Piston rod non-rusting, polished. Body is made of aluminium, red anodised. HART-COAT® surface for wear-resistance. Operating temperature 0 - 60 °C.

Order no.	Size	F3		Weight [g]
			[kN]	
565859	25		0,20	800
565860	32		0,31	1200
565861	40		0,49	2000
565862	50		0,79	2900

F3 = at 6 bar max. permissible operating pressure

#### Application:

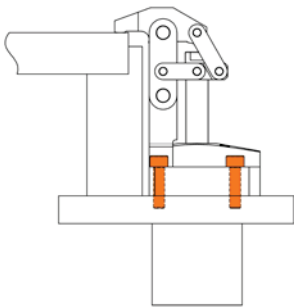
The special kinematics of the link clamp permits use in restricted spaces, such as clamping pockets or clamping slots.

In the opened state, the link clamp is very flat and so permits loading and unloading of the workpieces without disturbing contours.

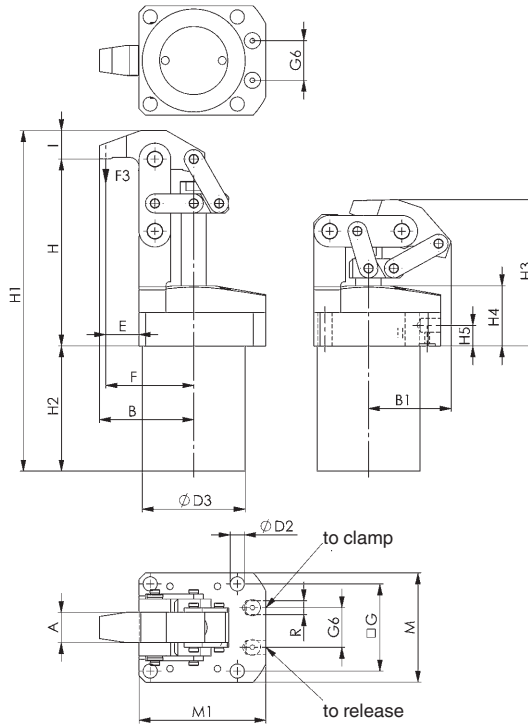
Use is possible even in a material handling line, as workpieces or trays can be transported further collision-free without lifting.



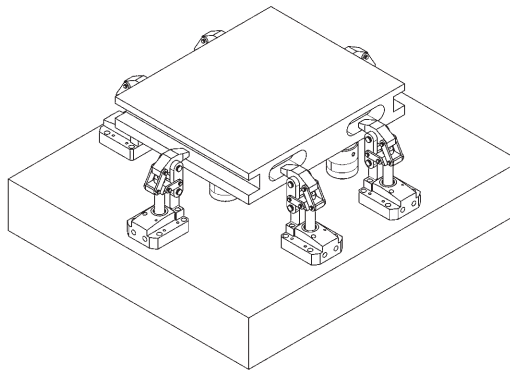
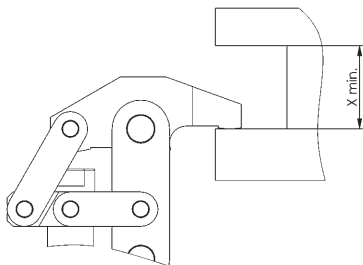
#### Example of mounting:



From above with 4 socket cap screws through the flange.



#### Application examples:



#### Recommendations



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#### Dimensions:

Order no.	Size	A	B	B1	dia. D2	dia. D3	E	F	G	G6	H	H1	H2	H3	H4	H5	I	M	M1	R	Piston dia.	X min.
565859	25	12	46,0	37,0	5,5	47	17	42,0	40	21	88,5	161	59	71,0	31	12,5	13	50	60	G1/8	25	17
565860	32	16	53,5	40,4	6,6	55	20	49,5	47	21	95,5	181	70	78,2	31	12,5	15	59	67	G1/8	32	25
565861	40	19	59,5	52,1	9,0	65	21	55,5	55	25	118,0	215	79	92,4	38	13,0	18	69	80	G1/4	40	25
565862	50	22	71,0	57,0	11,0	70	25	67,0	67	28	133,0	241	86	107,5	44	15,0	22	84	93	G1/4	50	35

Subject to technical alterations.

## No. 6829LA

### Link clamp, pneumatic, flange version

With clamp arm, which can be lowered sensor groove and magnetic piston for end-position monitoring.

Double-acting. Parts of mechanism are made of steel and burnished.

Piston rod non-rusting, polished.

Body is made of aluminium, red anodised. HART-COAT® surface for wear-resistance.

Operating temperature 0 - 60 °C.



Order no.	Size	F3		Weight [g]
			[kN]	
569830	25		0,20	800
569831	32		0,31	1200
569832	40		0,49	2000
569833	50		0,79	2900
569834	63		1,25	3500

F3 = at 6 bar max. permissible operating pressure

### Application:

The special kinematics of the link clamp permits use in restricted spaces, such e.g. in clamping pockets or clamping slots.

In the opened state, the link clamp is very flat and so permits loading and unloading of the workpieces without disturbing contours.

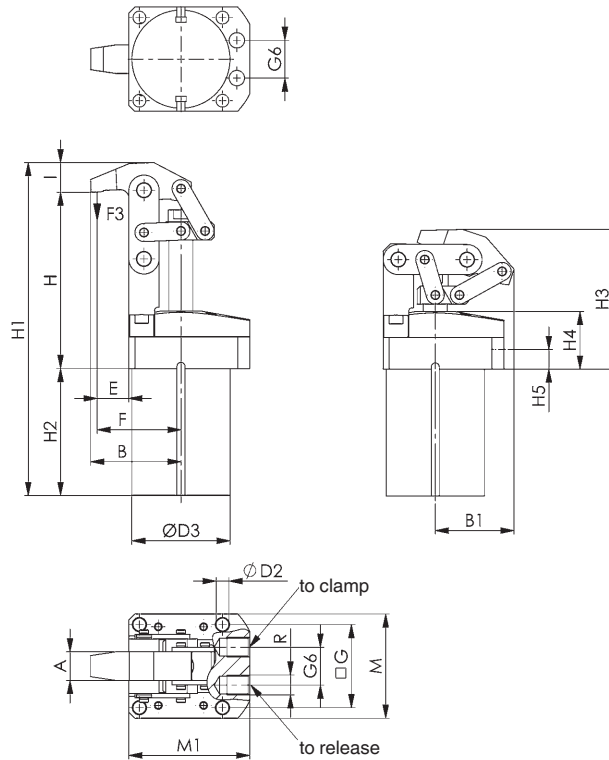
Use is possible even in a material handling line, as workpieces or trays can be transported further collision-free without lifting.

### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241.

Version: PUR cable 0.3 m with M8 plug connection and rotatable knurled nuts.

Switching function: NOC. Output: PNP.



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### Dimensions:

Order no.	Size	A	B	B1	dia. D2	dia. D3	E	F	G	G6	H	H1	H2	H3	H4	H5	I	M	M1	R	Piston dia.	X min.
569830	25	12	46,3	37,0	5,5	47	17	42,0	40	21	87,3	169,0	67	72,4	31	11,5	13	50	60	G1/8	25	17
569831	32	16	53,7	40,4	6,5	55	20	49,5	47	21	94,2	186,0	75	78,2	31	12,5	15	59	67	G1/8	32	25
569832	40	19	59,8	52,2	8,5	65	21	55,4	55	25	116,7	220,3	84	92,4	38	13,0	18	69	80	G1/4	40	25
569833	50	22	71,3	57,0	10,5	70	25	67,0	67	28	131,7	246,3	91	107,5	44	15,5	22	84	93	G1/4	50	35
569834	63	22	71,3	57,0	10,5	85	23	67,0	72	28	131,7	246,3	91	107,5	44	16,0	22	88	98	G1/4	63	35

Subject to technical alterations.

## No. 6828M

### Pneumatic toggle clamp

Double-acting.

Max. operating pressure 6 bar.

Mini design in block version for clamping and gripping technology.

High-strength aluminium housing, anodised.

Size 16, 20 and 25 with magnetic piston for end-position monitoring. Clamp arm made from steel, bronzed, with three holes.



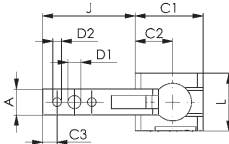
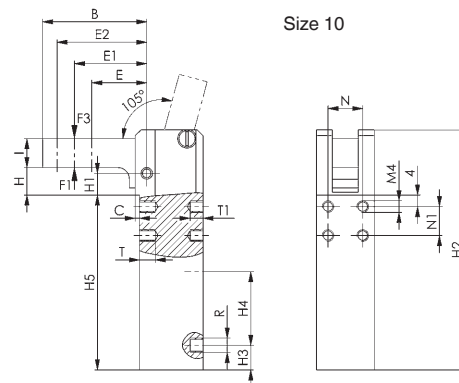
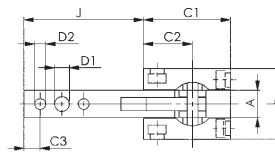
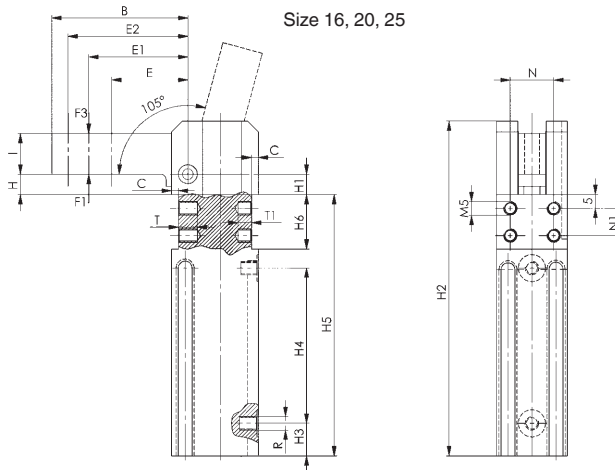
Order no.	Size	Clamping moment at 5 bar	Holding moment max.	Weight
		[Nm]	[Nm]	
567170	10	2,5	8	100
91843	16	8,0	25	300
91868	20	15,0	54	550
91884	25	25,0	75	850

#### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241.

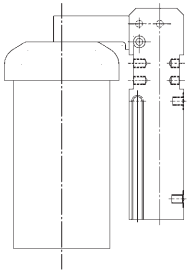
0.3 m PUR cable with M8 connector and rotatable knurled nuts.

Switching function: NOC. Output: PNP.



### Application example:

Mini clamp, e.g. as „cover close device“. Defined, locked close position through toggle lever mechanism.



CAD



### Recommendations



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### Dimensions:

Order no.	Size	A	B	C	C1	C2	C3	D1	D2 H7	E	E1	E2	H	H1	H2
567170	10	9	36	1,5	23,5	13	5	4,5	3	19	25,0	31	9,5	7,5	83
91843	16	10	50	2,5	32,0	18	6	5,5	4	28	36,0	44	7,5	7,5	123
91868	20	12	60	3,0	39,0	22	8	6,5	5	32	42,0	52	15,0	14,0	158
91884	25	16	75	4,0	45,0	25	10	8,5	6	40	52,5	65	19,0	17,0	182

Order no.	Size	H3	H4	H5	H6 +0.1	I	J	L	N ±0.1	N1 ±0.1	R	T	T1	Piston dia.
567170	10	8,5	25,5	60,5	-	10	32	20	12	10	M5	5,5	4,5	10
91843	16	12,0	57,0	96,0	20	15	44	26	16	10	M5	7,0	5,0	16
91868	20	15,0	69,0	120,0	25	18	53	30	20	15	G1/8	8,0	6,0	20
91884	25	17,5	80,0	136,0	28	22	68	35	25	18	G1/8	8,0	6,0	25

Subject to technical alterations.

## No. 6828H

### Pneumatic clamp with lever

double-acting and with additional lever for manual opening and/or closing.

Max. operating pressure 6 bar.

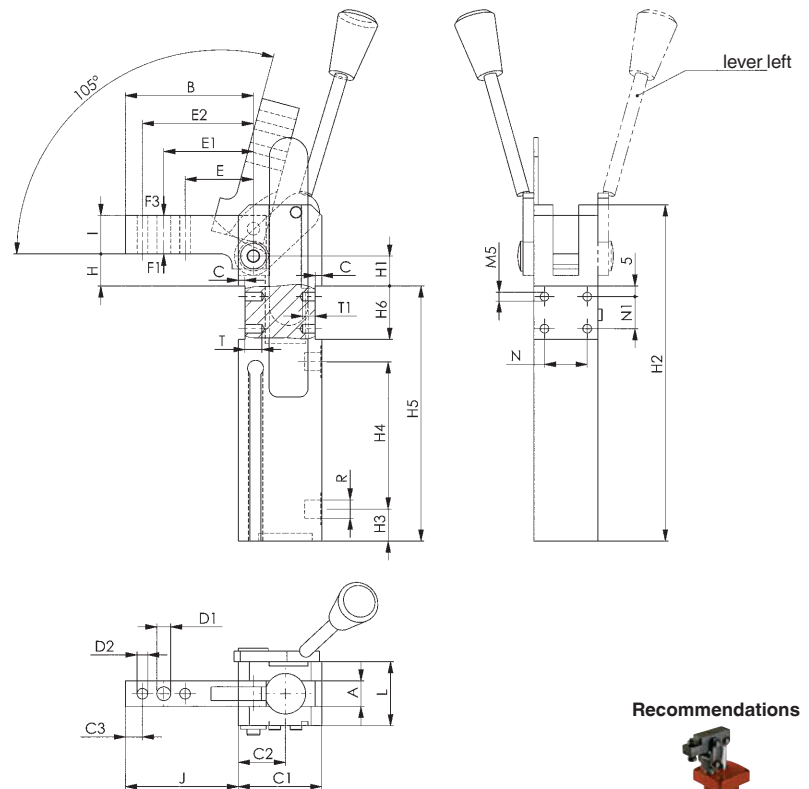
Mini design in block version for clamping and gripping technology. High-strength aluminium, red anodised. **Magnetic piston for end-position monitoring.** Clamp arm made from steel, bronzed, with three bores.



Order no.	Size	Clamping moment at 5 bar [Nm]	Lever left	Lever right	Holding moment max. [Nm]	Weight [g]
555083	16	8	-	●	25	320
555170	16	8	●	-	25	320
555084	20	15	-	●	54	700
555171	20	15	●	-	54	700
555085	25	25	-	●	75	920
555172	25	25	●	-	75	920

#### Note:

Suitable proximity switches for end-position monitoring are available using order no. 392241. 0.3 m PUR cable with M8 connector and rotatable knurled nuts. Switching function: NOC. Output: PNP.



#### Recommendations



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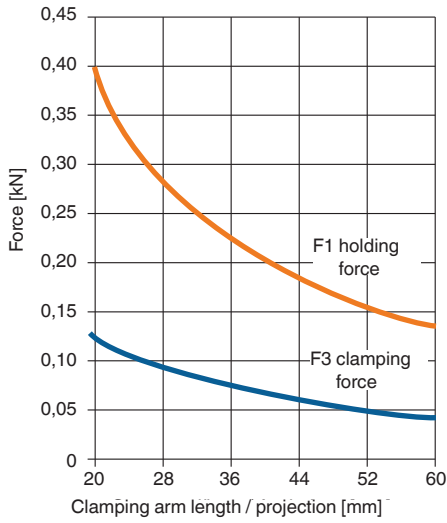
#### Dimensions:

Order no.	Size	A	B	C	C1	C2	C3	D1	D2 H7	E	E1	E2	H	H1	H2	H3	H4	H5	H6 +0.1	I	J	L	N ±0.1	N1 ±0.1	R	T	T1	Piston dia.
555083	16	10	50	2,5	32	18	6	5,5	4	28	36,0	44	7,5	7,5	123	12,0	57	96	20	15	44	26	16	10	M5	7	5	16
555170	16	10	50	2,5	32	18	6	5,5	4	28	36,0	44	7,5	7,5	123	12,0	57	96	20	15	44	26	16	10	M5	7	5	16
555084	20	12	60	3,0	39	22	8	6,5	5	32	42,0	52	15,0	14,0	158	15,0	69	120	25	18	53	30	20	15	G1/8	8	6	20
555171	20	12	60	3,0	39	22	8	6,5	5	32	42,0	52	15,0	14,0	158	15,0	69	120	25	18	53	30	20	15	G1/8	8	6	20
555085	25	16	75	4,0	45	25	10	8,5	6	40	52,5	65	19,0	17,0	182	17,5	80	136	28	22	68	35	25	18	G1/8	8	6	25
555172	25	16	75	4,0	45	25	10	8,5	6	40	52,5	65	19,0	17,0	182	17,5	80	136	28	22	68	35	25	18	G1/8	8	6	25

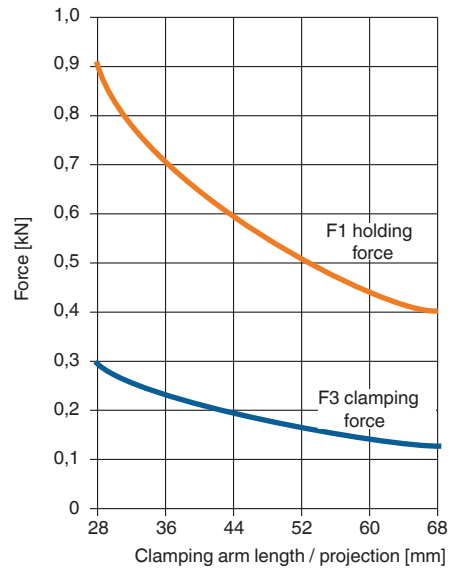
Subject to technical alterations.

## Force diagrams 6828M and 6828H

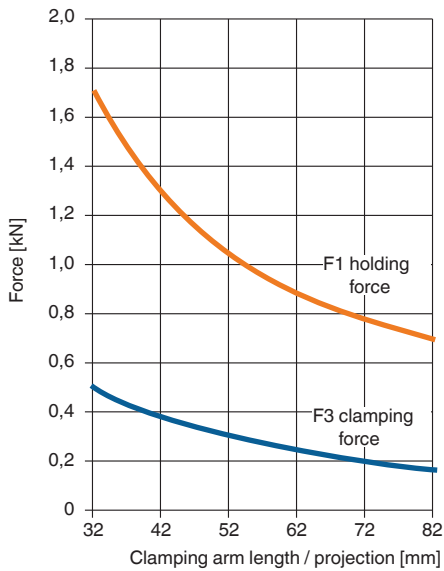
### Size 10



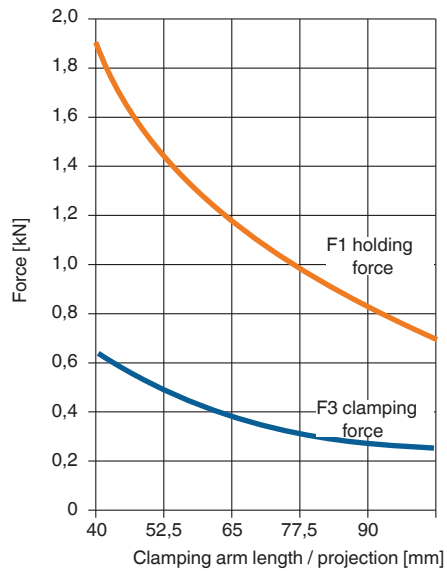
### Size 16



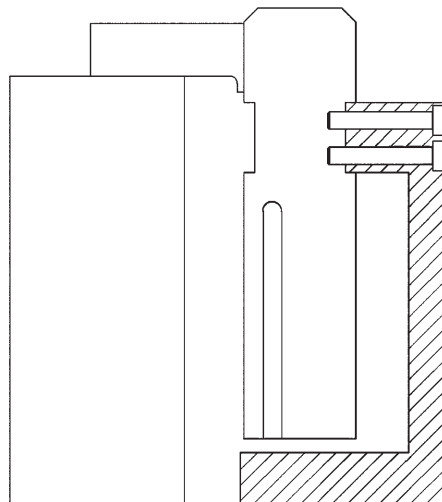
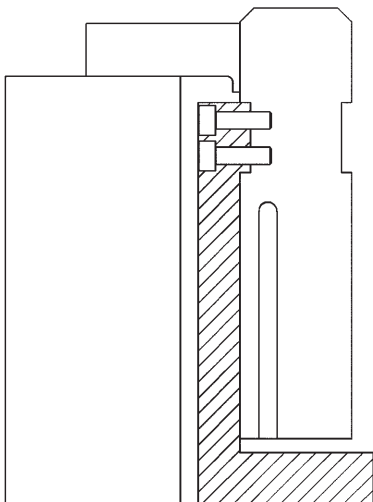
### Size 20



### Size 25



## Examples of mountings:



No. 6828U

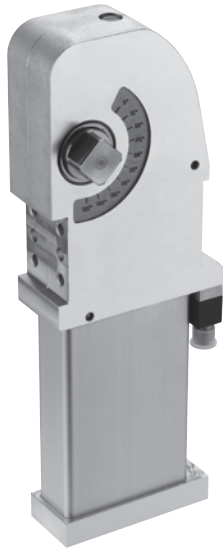
## Heavy pneumatic toggle clamp

### Double-acting.

Max. operating pressure 6 bar. With continuously adjustable opening angle in the range 10° to 135°. Aluminium case. With pneumatic end position cushioning and self-locking. With inductive query 24V as standard. **Delivery without clamp arm.**

Accessories (not supplied as standard):

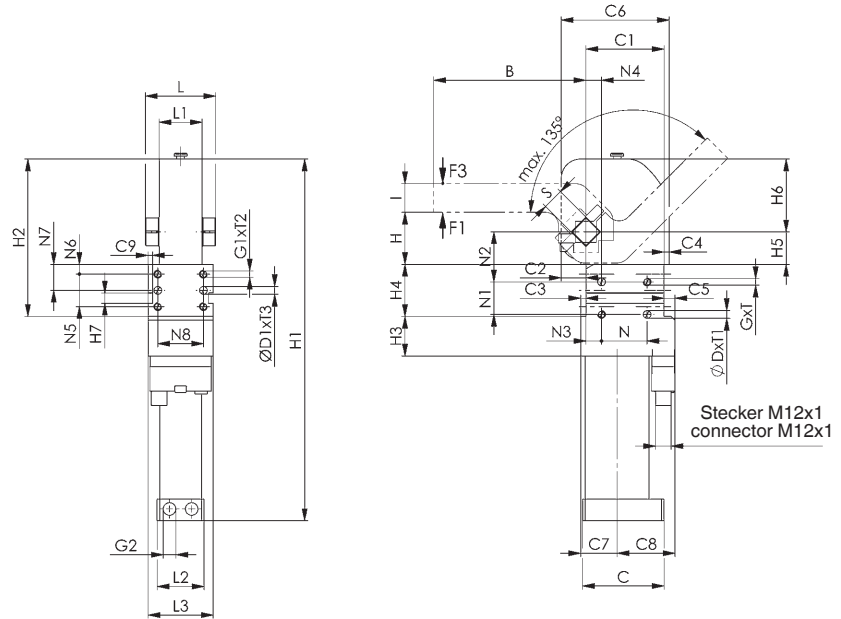
- Clamping arm no. 6828SP centre, right and left
- Connecting plug for inductive query



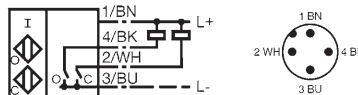
Order no.	Size	Clamping moment at 5 bar		Weight
		[Nm]		
565864	40	120		2,0
565865	50	160		3,6
565866	63	380		4,8

### Application:

These pneumatic clamps are suitable for use in material handling lines and special machines. Opening and clamping position of the clamp can be controlled electrically, allowing integration into automated manufacturing processes.



### Connection sketch



O ... open  
C ... close

### Recommendations



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### Dimensions:

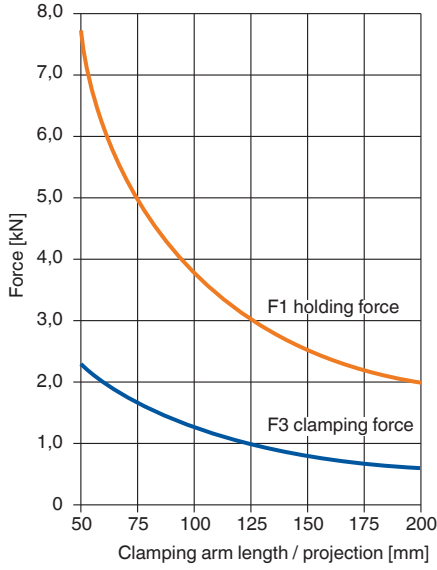
Order no.	Size	B	C	C1 *	C2	C3	C4	C5	C6	C7	C8	C9	dia. D H7	dia. D1 H7	G	G1	G2	H ±0.2	H1	H2	H3	H4 +0.1	H5
565864	40	117	62,5	60	19,0	4,0	4,0	8,5	83	28	44,5	3,5	6	6	M6	M6	G1/8	40,5	278	121,0	30,5	40	25,0
565865	50	144	82,0	93	10,5	6,5	4,5	4,5	108	50	54,0	-	-	8	-	M8	G1/8	51,5	286	149,5	16,5	55	36,5
565866	63	144	106,0	93	11,0	6,5	5,0	17,0	109	53	63,5	-	-	8	-	M8	G1/4	51,5	329	158,5	16,5	55	36,5

Order no.	Size	H6	H7 N9	I ±0,1	L	L1-0.5	L2	L3	N*	N1*	N2 ±0.05	N3 ±0.05	N4 ±0.05	N5*	N6 ±0.1	N7 ±0.05	N8*	S h9	T	T1	T2	T3	Piston dia.
565864	40	56	8	22	54	33	36	50	35	25	38,5	12	12	25	7,5	20	35	16	9	8	12	8	40
565865	50	58	-	28	69	45	48	48	-	-	-	-	-	32	11,0	27	30	19	-	-	12	12	50
565866	63	67	-	28	79	48	43	48	-	-	-	-	-	32	11,0	27	30	22	-	-	12	12	63

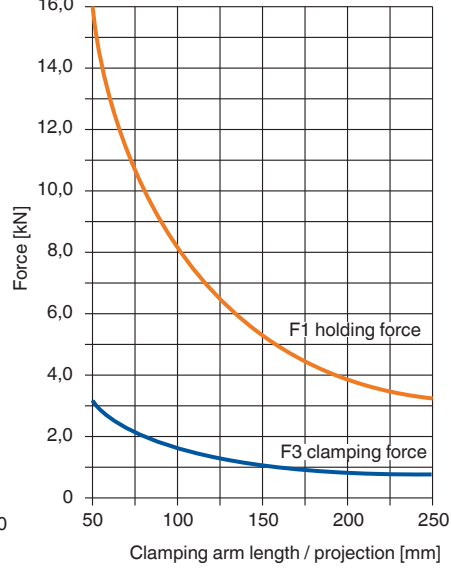
\* Tolerance for peg holes ±0.02 mm; for threaded holes ±0.1 mm.

Subject to technical alterations.

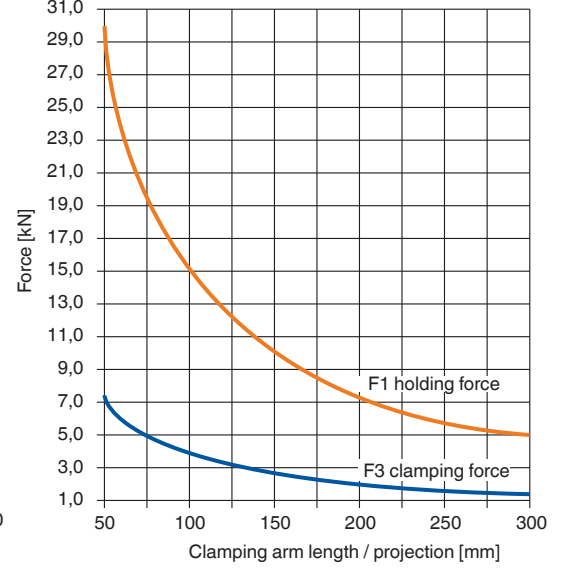
## Force diagrams 6828U-40



## 6828U-50



## 6828U-63



## No. 6828SP

### Clamp arm

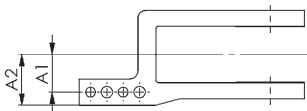
made of steel, for heavy pneumatic toggle clamp no. 6828U, size 40, 50, 63.



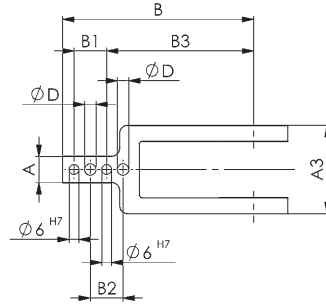
Order no.	Size	Article no.	A -0,1	A1 ±0,1	A2	A3	B	B1 ±0,02	B2 ±0,2	B3 ±0,1	dia. D	Weight [g]
92080	40	6828SPL-40	16	23	31	54	117	20	20	90	7	520
91900	40	6828SPM-40	16	-	-	54	117	20	20	90	7	520
92007	40	6828SPR-40	16	23	31	54	117	20	20	90	7	520
92072	50	6828SPL-50	20	34	44	68	144	30	30	105	9	855
91959	50	6828SPM-50	20	-	-	68	144	30	30	105	9	855
92056	50	6828SPR-50	20	34	44	68	144	30	30	105	9	855
92130	63	6828SPL-63	20	37	47	78	144	30	30	105	9	1150
92098	63	6828SPM-63	20	-	-	78	144	30	30	105	9	1150
92114	63	6828SPR-63	20	37	47	78	144	30	30	105	9	1150

### Clamp arm variants:

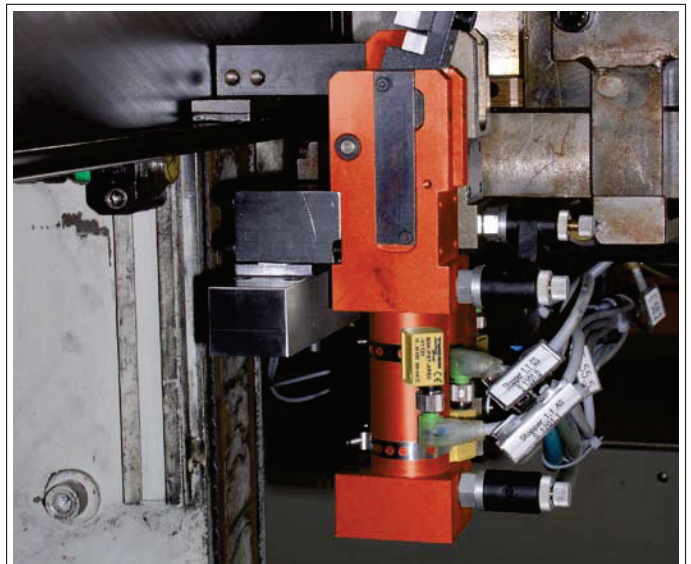
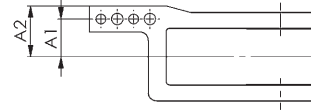
SPL (Clamp arm left)



SPM (Clamp arm in the middle)



SPR (Clamp arm right)



Subject to technical alterations.